Name_____

Homework 33.3

Solve each equation with the quadratic formula.

1) $n^2 + 5n - 14 = 0$

2) $6k^2 + 12k - 90 = 0$

3) $8p^2 = 1 - 9p$

4) $4x^2 - 54 = 6x$

Divide.

5) $(3m^3 + 2m^2 + 30m) \div 6$

6) $(18n^4 + 3n^3 + 3n^2) \div 9n^2$

Factor the common factor out of each expression.

7) $-40 + 24x - 28x^2$

8) $-12r^6 - 15r + 9$

Answers to Homework 33.3

1) $\{2, -7\}$

2) $\{3, -5\}$

3) $\left\{\dfrac{-9 + \sqrt{113}}{16}, \dfrac{-9 - \sqrt{113}}{16}\right\}$

4) $\left\{4\dfrac{1}{2}, -3\right\}$

5) $\dfrac{m^3}{2} + \dfrac{m^2}{3} + 5m$

6) $2n^2 + \dfrac{n}{3} + \dfrac{1}{3}$

7) $4(-10 + 6x - 7x^2)$

8) $3(-4r^6 - 5r + 3)$